

MAIL STOP AF
RESPONSE UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 3762

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Rogier Receveur	Confirmation No.	3142
Serial No.:	10/781,245		
Filed:	February 18, 2004	Customer No.:	27581
Examiner:	George C. Manuel		
Group Art Unit:	3762		
Docket No.:	P0011377.00/1111-163US01		
Title:	IMPLANTABLE TEMPERATURE SENSOR		

CERTIFICATE UNDER 37 CFR 1.81 hereby certify that this correspondence is being transmitted via the United States Patent and Trademark Office electronic filing system on February 18, 2010.

By: 

Name: Patricia Cygan

AMENDMENT

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Final Office Action mailed December 18, 2009, the period of response for which runs through March 18, 2010, please amend the application as follows.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Previously Presented): An implantable device comprising:

a feedthrough assembly partially disposed within a hermetically sealed housing of the implantable device said feedthrough assembly including:

- a sleeve outer portion hermetically bonded to the housing;
- a thermal insulator disposed within the sleeve outer portion;
- a pin spaced from the housing and at least partially disposed within the thermal insulator, wherein a portion of the pin is configured to be exposed to an external medium;
- and
- a temperature sensor disposed within the pin, wherein a physical parameter of the external medium is sensed through the pin by the sensor and correlates to the temperature of the external medium.

Claim 2 (Previously Presented): The device of claim 1, wherein the implantable device is a pacemaker, or cardioverter-defibrillator.

Claim 3 (Original): The device of claim 1, wherein the implantable device is a lead.

Claim 4 (Currently Amended): The device of claim 1, wherein the pin includes a hollow interior and the temperature sensor is disposed within the hollow interior.

Claim 5 (Original): The device of claim 4, wherein the temperature sensor is in contact with an interior surface of the pin.

Claim 6 (Original): The device of claim 4, further comprising a thermal barrier disposed within the hollow interior and isolating the temperature sensor from an interior of the housing.

Claim 7 (Original): The device of claim 6, wherein the thermal barrier extends beyond the hollow interior of the pin and into the interior of the housing.

Claim 8 (Original): The device of claim 1, further comprising a sleeve inner portion disposed between the pin and the thermal insulator.

Claim 9 (Currently Amended): An implantable device including a feedthrough assembly disposed within a hermetically sealed housing of the implantable device comprising:
~~means for sensing a physical parameter~~ a temperature sensor disposed within a pin; and
means for hermetically sealing the pin to the housing, wherein the pin extends through an opening in the housing such that at least a portion of the pin extends outside of the housing.

Claim 10 (Canceled).

Claim 11 (Currently Amended): A feedthrough assembly comprising:
a sleeve positionable within an opening through a housing of an implantable medical device and hermetically sealable to the housing;
an insulator disposed within the sleeve and hermetically sealed thereto; and
a pin disposed within and hermetically sealed to the insulator, the pin including a hollow, fluid filled interior, a first membrane configured to be exposed to an external medium, and a second membrane adapted to be coupled with a sensor positionable within the housing, wherein a physical parameter of the second membrane is sensed by the sensor and correlates to a pressure within the external medium.

Claim 12 (Currently Amended): The feedthrough assembly of claim 11, wherein a surface area of the first membrane is smaller than a surface area of the second membrane.

Claim 13 (Canceled).

Claim 14 (Currently Amended): ~~The device of claim 13~~ An implantable device comprising:
 a hermetically sealed housing; and
 a feedthrough assembly disposed in an opening in and hermetically sealed to the housing,
the feedthrough assembly comprising a sensor assembly disposed in the opening such that at
least a portion of the sensor assembly extends outside of the housing,
 wherein the sensor assembly is configured to sense one or both of temperature and
pressure.

Claim 15 (Currently Amended): ~~The device of claim 13~~ An implantable device comprising:
 a hermetically sealed housing; and
 a feedthrough assembly disposed in an opening in and hermetically sealed to the housing,
the feedthrough assembly comprising a sensor assembly disposed in the opening such that at
least a portion of the sensor assembly extends outside of the housing,
 wherein the sensor assembly comprises[[:]] a pin at least partially disposed within the
opening in the housing[[:]] and a temperature sensor disposed within the pin.

Claim 16 (Currently Amended): The device of claim [[13]] 15, wherein a portion of the pin
within which the temperature sensor is disposed extends outside of the housing.

Claim 17 (Previously Presented): The device of claim 15, wherein the feedthrough assembly
further comprises:
 a sleeve outer portion hermetically bonded to the opening in the housing; and
 a thermal insulator disposed within the sleeve outer portion;
 wherein the pin is at least partially disposed within the thermal insulator.

REMARKS

This Amendment is responsive to the Final Office Action dated December 18, 2009. Applicant has amended claims 4, 9, 11, 12 and 14 – 16, and canceled claims 10 and 13. Upon entry of this Amendment, claims 1 – 9, 11, 12 and 14 – 17 will be pending in the present application.

Allowable Subject Matter

In the Final Office Action, the Examiner indicated that claims 1 – 8, 11 and 12 are allowable in their present form, and that claims 10 and 14 – 17 include allowable subject matter and would be allowable if rewritten in independent form. In this Amendment, Applicant has amended claim 9 to include the elements of objected to claim 10, which is canceled, and has amended claims 14 and 15 to include all of the subject matter recited by their base claim, claim 13, which is also canceled. Claim 16 is amended to depend from allowable independent claim 15. Claim 17 also depends from claim 15. Applicant has also amended claims 4, 11 and 12 for reasons unrelated to the patentability of the claim over the prior art. Consequently, all of pending claims 1 – 9, 11, 12 and 14 – 17 are in condition for allowance.

Claim Rejection under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 9 and 13 under 35 U.S.C. § 102(b) as being anticipated by Fraley et al. (U.S. Patent No. 6,622,046). Applicant does not acquiesce in, and respectfully traverses, the rejection. Nevertheless, in the interest of expediting the allowance of this application, Applicant has amended the claims such that all pending claims are allowable, as described above. Applicant reserves the right to represent the claims as previously presented in one or more continuing applications.

CONCLUSION

Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date: February 18, 2010

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